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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/502,521

07/26/2004

Hendricus Clemens De Ruijter

NL 020054

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24737 7590 10/30/2007

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

MATIN, NURUL M

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

10/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/502,521	Applicant(s) DE RUIJTER ET AL.	
	Examiner Nurul M. Matin	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/19/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (fig.1)[hereinafter, refers to as "prior art"] in view of Dolan US 5533048.

Re claim 1, the prior art discloses a method of extracting data from a received analogue signal, the received analogue signal having a preamble of a predetermined preamble frequency and a predetermined preamble duration, and a data portion with the data, the data portion having a predetermined data rate, the method comprising obtaining a signal representing a DC value (V_{dc}) of the received signal (fig. 1, page 1, line 25, "the output is therefore the DC value V_{dc} of the output from the demodulator"), comparing the received analogue signal to the signal representing a DC value (V_{dc}) of

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the received signal (fig.1, page 2, line 4-5,"The comparator thus receives directly the analogue demodulated signal, and the DC component thereof"),and generating, in dependence on the comparison of the received analogue signal to the DC value (V_{dc}) of the received signal, a digital bit stream(fig.1, page 2, line 4-6," The comparator thus receives directly the analogue demodulated signal and the DC component thereof. The output of the comparator is a digital bit stream representing the data in the analogue demodulated signal"); wherein the signal representing a DC value (V_{dc}) of the received signal is obtained using a low pass filter (fig.1, page 1, line 23-28); and wherein the 3 db value of the low pass filter is at least 50 kHz (page 1, line 13-16 and furthermore this is just a design choice of how do you set up the value). The prior art fails to teach that the received signal is filtered so as to reject the predetermined preamble frequency. However, Dolan does (col.4, line 21-26, "The apparatus further includes a filter that receives a receiver output signal from the receiver and that filters out the pilot component of the composite signals received by the receiver from the transmitter. Preferably, the filter is a notch filter having a notch at the frequency of the pilot tone").

Therefore, taking the combined teaching of Prior art and Dolan, as a whole, it would have been obvious to one of ordinary skill in the art to incorporate the arrangement of the received signal is filtered so a to reject the predetermined preamble frequency as thought in Dolan into Prior art to remove the preamble frequency or pilot frequency for synchronization).

Re claim 3, Prior art and Dolan references teach a method according to claim 2, and Prior art reference also teaches the low pass filter is switchable between a first cut-

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off frequency and a second cut-off frequency lower than the first cut-off frequency, and that during reception of the preamble the low pass filter is switched to the first cut-off frequency, and that during reception of data the low pass filter is switched to the second cut-off frequency (fig.1, page 1, 23-page 2, line 4, The low pass filter has a 3 dB cut-off frequency well below the preamble frequency and the data rate, and the output is therefore the DC value V_{dc} of the output from the demodulator. The low pass filter is a first order RC filter with two resistors R_1 and R_2 in series and a switch connected in parallel with one of the resistors. During reception of the preamble, the switch is closed, whereby the low pass filter is determined by the resistor R_2 and the capacitor C , which gives a short time constant that enables reasonably fast settling of the data slicer within the preamble time frame. After reception of the preamble the switch is opened, whereby the low pass filter is determined by the resistors R_1+R_2 and the capacitor C , which gives a longer time constant and a lower cut-off frequency and thus a stable DC value and also good noise suppression").

Re claim 4, Prior art and Dolan references teach a method according to claim 1, and prior art references also teaches that the received analogue signal is a demodulated signal (fig.1, page 1, line 19-20, " figure 1 shows a receiver with a conventional data slicer circuit with a demodulator receiving a radio frequency signal from a receiving antenna").

Re claims 5, which claim the same subject matter as recited in claims 1.

Therefore, claims 5 has been analyzed and rejected with respect to claims 1.

Re claims 6, which claim the same subject matter as recited in claims 3.

Therefore, claims 6 has been analyzed and rejected with respect to claims 3.

Re claim 7, Prior art and Dolan references teach a data slicer circuit according to claim 5, and Dolan reference also teaches that the filter for rejecting the predetermined preamble frequency is a notch filter (col.4, line 21-26).

Re claim 8, the combination of the Prior art and Dolan as a whole also teach that that the notch filter is a first order notch filter with a 3 dB bandwidth equal to its frequency of maximum rejection (Prior art, page 1, Para [0005]).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nurul M. Matin whose telephone number is 571-270-1188. The examiner can normally be reached on mon-fri (7:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nurul Matin
Examiner.


MOHAMMED GHAYOUR
SUPERVISORY PATENT EXAMINER

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